

Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	40AH	
Dimension	Length	197mm (7.76 inches)
	Width	165mm (6.50 inches)
	Height	170mm (6.69 inches)
	Total Height (with Terminal)	170mm (6.69 inches)
Approximate Weight	14.5 kg (32.0 lbs)	
Battery Type	Valve Regulated Lead-Acid Battery, AGM Design	
Terminal Type	NB / IT	
Rated Capacity	42.0AH	(20hr, 1.75V/cell, 25°C/77°F)
	40.6AH	(10hr, 1.75V/cell, 25°C/77°F)
	34.4AH	(5hr, 1.75V/cell, 25°C/77°F)
	34.5AH	(3hr, 1.60V/cell, 25°C/77°F)
	24.4AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	540A	
Internal Resistance	9mΩ	
Operating Temp. Range	Discharge:	-20°C (-4°F)~50°C (122°F)
	Charge:	-20°C (-4°F)~50°C (122°F)
	Storage:	-20°C (-4°F)~40°C (104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Container Material	ABS (Option: 94-HB & 94-V0 flame retardant case)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	SigmasTek SP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



Constant Current Discharge (Amperes Per Battery) at 25°C (77°F)

F.V. (V/cell)	Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V		138.8	96.5	73.3	43.2	24.4	15.0	11.5	7.50	4.96	4.21	2.18
1.65V		125.8	88.9	68.6	40.9	23.6	14.5	11.2	7.26	4.91	4.16	2.17
1.70V		114.1	82.4	64.5	38.8	22.8	14.1	10.7	7.06	4.84	4.08	2.14
1.75V		103.6	75.6	60.4	37.3	22.1	13.6	10.4	6.88	4.77	4.06	2.10
1.80V		91.90	68.8	55.3	35.9	21.1	13.1	10.2	6.72	4.69	4.00	2.08
1.85V		68.50	53.8	45.8	30.4	18.9	12.0	9.50	6.25	4.42	3.78	2.06

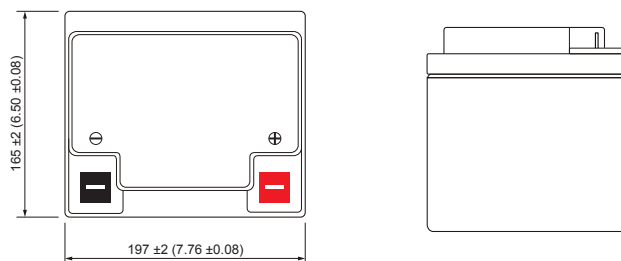
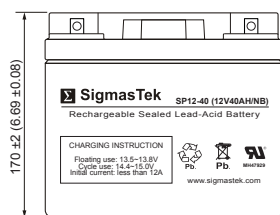
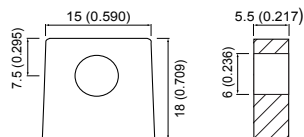
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell)	Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V		230.0	164.0	128.3	78.8	45.9	28.5	22.0	14.5	9.69	8.27	4.29
1.65V		213.5	154.6	122.0	75.1	44.5	27.7	21.4	14.0	9.61	8.20	4.28
1.70V		196.4	144.6	115.6	71.8	43.4	27.1	20.6	13.7	9.49	8.05	4.23
1.75V		183.4	135.7	109.8	69.4	42.2	26.1	20.1	13.4	9.36	7.97	4.15
1.80V		166.2	125.5	101.8	67.4	40.5	25.3	19.8	13.1	9.23	7.90	4.11
1.85V		125.2	99.40	85.40	58.0	36.4	23.3	18.5	12.3	8.73	7.47	4.08

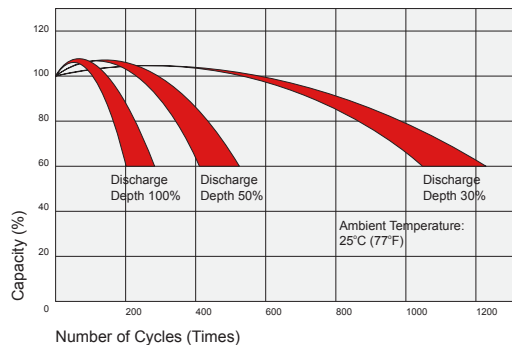
Dimensions

NB Terminal

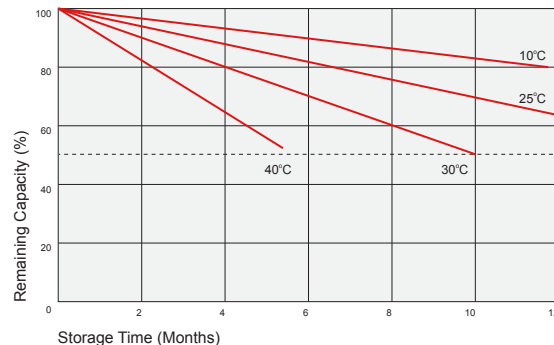
Unit: mm (inches)



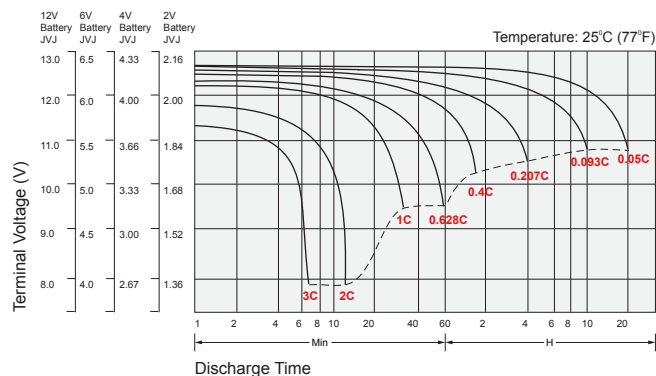
Cycle Service Life



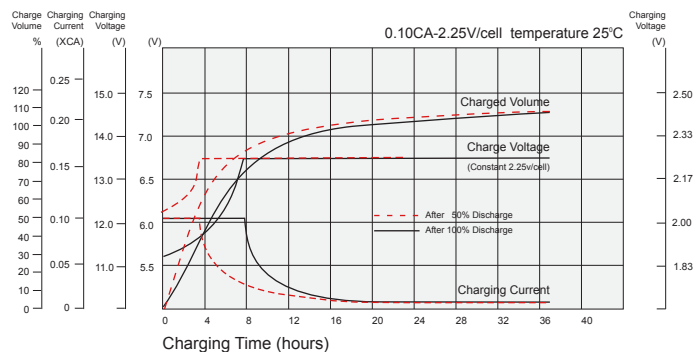
Self Discharge Characteristics



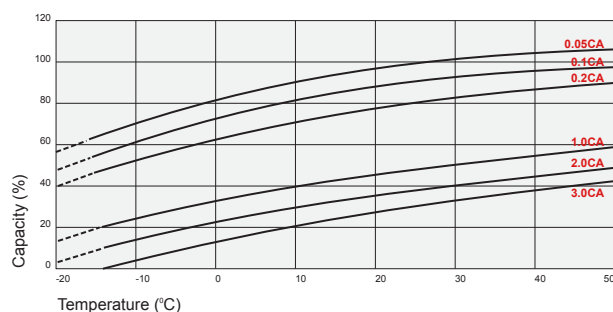
Discharge Characteristics



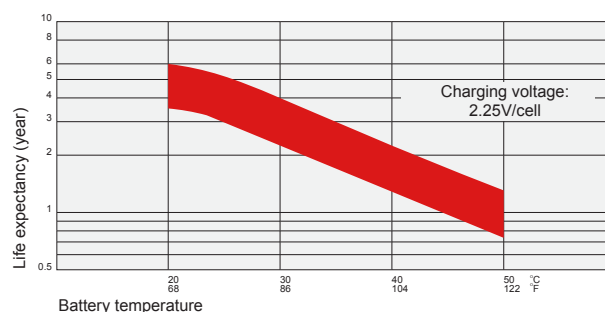
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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